Toward a Biodiverse City of Toronto

Presentation to Global Platform for Sustainable Cities
Bringing Nature to Cities
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Toronto is part of the traditional territory of many nations including the Mississauga’s of the Credit, the Anishinabek, the Chippewa, the Haudenosaunee and the Wendat peoples and Toronto is home to many diverse First Nations, Inuit and Métis peoples. We acknowledge that Toronto is covered by Treaty 13 with the Mississauga’s of the Credit and the Williams Treaties signed with multiple Mississauga’s and Chippewa bands.
Climate Change and Biodiversity Loss

More heat

More extreme weather events

Biodiversity loss

**DAILY TEMPERATURE MAXIMUM**
- 44° Celsius
- 2040-50

**HOT DAYS**
- 66
- Above 30°
- 2040-50

**EXTENDED HEAT WAVES**
- 2.5
- Per year
- 2040-50

**DAILY RAINFALL MAXIMUM**
- 166
- Millimetres
- 2040-50

**BIODIVERSITY IN ONTARIO IS AT RISK**

Due to development and other human activities, Southern Ontario alone has lost more than:

- 70% wetlands
- 80% forests
- 98% grasslands

200+ plants and animal species are now classified as at-risk of becoming locally extinct, including nearly all of Ontario's turtle species.
Toronto’s Environmental Priorities

• **TransformTO** is Toronto’s ambitious climate action strategy.

• lays out a set of long-term, low-carbon goals and strategies to reduce local greenhouse gas emissions and improve our health, grow our economy, and improve social equity.

• Oct 2019 Toronto City Council declared a climate emergency and committee Toronto to be **net zero by 2050 or sooner**
Toronto is becoming denser

Downtown skyline in 2005
Toronto is becoming denser

Downtown skyline in 2015*

*Includes approved towers that are as yet unbuilt.
The Toronto Official Plan

Provides the foundation for most of our work on biodiversity:

- Ways in which City building will be environmentally friendly
- Definition of biodiversity
- Provision of green infrastructure
- Opportunities for habitat in the built environment
- The effects of a changing climate on biodiversity and ecosystem health
- Seasonal movements of migrating species
- Protection of natural features and water resources
- Preserving and enhancing the urban forest
Biodiversity in Toronto
Still surprisingly rich
Biodiversity Strategy

• Toronto’s first intentional, coordinated framework for supporting biodiversity

• 23 actions to protect and enhance biodiversity in built-up areas

• Proposes a “made in Toronto” ecological integrity monitoring framework

• Annual progress reporting

• Aligns with other City strategies and supports provincial, national and international biodiversity strategies
Ravine Strategy

• Toronto’s first intentional, coordinated framework for management, use, enhancement and protection of ravine system

• 11,000 ha of land (17% of city area)

• Contain most of Toronto’s natural parklands and biodiversity, extensive infrastructure, cultural heritage

• 20 actions address protection, investment, connection, partnerships and celebration

• Capital funding and 10 priority investment areas
Toronto Green Standard

Five Priority Areas

Three Types of Development
1. Low-rise Residential
2. Mid to High-rise Residential and Non-Residential
3. City and Agency

Required and Voluntary

Zero Emissions Building Framework

Air Quality | Energy/ GHG & Resiliency | Water Balance Quality and Efficiency | Ecology | Solid Waste
Toronto Green Standard

Ecology Development Features

Tree Planting

Enhancement of native plant and animal species, habitat and ecosystems

Adequate soil volumes

Protect, restore and enhance Ravine and Natural Feature Protected Areas

Design buildings to reduce bird collisions and mortality

Reduce nighttime glare and light trespass
Bylaws that Support Biodiversity

The Toronto Green Roof Bylaw

Ravine and Natural Feature Protection By-Law

- "The ravines in Toronto what animals are to Venice, hills are to San Francisco and the Thames River is to London. They are the heart of the City’s environmental geography and understanding ravines requires an understanding of the streets."

- Toronto City, Robert F. Brain (1999)

Soft Landscaping Bylaw

Long Grass and Weeds Bylaw to remove requirement for exemption for natural gardens
Relationship

• Many strategies and plans from various divisions across the City
• Complimentary goals and objectives related to protecting nature and connecting people to nature